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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,844	08/03/2001	Gary K. Michelson	101.0084-01000	8295

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EXAMINER

SNOW, BRUCE EDWARD

ART UNIT PAPER NUMBER

3738

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 09/921,844	Applicant(s) MICHELSON, GARY K.	
	Examiner Bruce E Snow	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56, 131-145 and 203-258 is/are pending in the application.
- 4a) Of the above claim(s) 2, 4, 16, 52-56, 132 and 134 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-15, 17-51, 131, 133, 135-145 and 203-258 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2, 8</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION***Election/Restrictions***

Claims 1, 3, 5-15, 17-51, 131, 133, 135-145, 203-258 read on the elected species as indicated by applicant in paper No. 6. All other claims are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7. Applicant's election with traverse of Species 3 (figure 12) in Paper No. 7 is acknowledged. The traversal is on the ground(s) that "*Applicant traverses the restriction requirement to the extent that it fails to identify any linking claim*". This is not found persuasive. Applicant's argument does not address the basis of a species restriction. A species restriction states that the Examiner believes there are patentable distinct embodiments; applicant can agree or disagree. Applicant's response stating that the restriction requirement fails to identify any linking claim is not an appropriate argument. When regarding a species restriction, a discussion regarding generic claims is more likely reasonable.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

All claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 131, and 219, what is the difference between "bone engaging structures" and "surface projections"? Please direct to specification and drawings for all support.

Claim 131 is ambiguous. The claim reads, "*surface projection having opposed side facets directed generally toward said leading and trailing ends, respectively, said side facets located between said forward facet and said rearward facet*". The side facets are directed towards the leading and trailing ends and so are the forward and rearward facets? Additionally, this claim is in direct conflict with claim 1 and 219. This claim is confusing the issue.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, all claims must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Due to the large number of claims only some specific claims will be addressed as examples purposes only. ***It is Applicant's responsibility to ensure all claimed limitations are shown in the drawings or to remove limitations or cancel the claims of the limitations not shown.***

Examples of claims not shown: Claim 6, the bases are spaced apart; Claim 8, the peaks are aligned along lines that are perpendicular to the longitudinal axis; Claims 9-13; Claim 15; Claim 18; Claim 21, Claim 131, etc.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-15, 17-51, 131, 133, 135-145, 203-258 (all claims not withdrawn from consideration) rejected under 35 U.S.C. 103(a) as being unpatentable over Aebi et al (6,482,233).

Aebi et al teaches a spinal implant comprising bone engaging structures that are generally pyramid-shaped formed on the upper and lower surfaces of the implant. The engaging structures are slanted towards the anterior therefore having a forward (anterior) facing facet that is shorter than a rearward facing facet and said forward facing facet has a steeper slope; the structures further include side facets. Applicant claims the opposite Aebi et al claiming the bone engaging structures slant rearward

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(posteriorly). However, both Aebi et al and applicant teach the bone engaging structures slant in a direction such to allow ease of insertion and to avoid retropulsion. See Aebi et al column 4, lines 30-34 and applicant's specification page 5, lines 5-9 and lines 15-19.

It would have been obvious to one having ordinary skill in the art to have slanted the bone engaging structures of Aebi et al posteriorly such that the implant could be introduced posterior-laterally and/or resist movement in the direction towards the spinal cord when a surgeon deems it necessary. Note that Aebi et al teaches the steeper angled face can be "from about 0 to 30 degrees" which the Examiner interprets to include negative angles.

➤ In the alternative, under 35 U.S.C. 103(a): Many of applicant's dependent claims claim a wide range of possibilities, for example, an angle can be less than 90 degrees, perpendicular, or greater than 90 degrees; the groove can be v-shaped, u-shaped, box-like shape; etc, lacking any criticality in the specification, the use of any claimed variation, range, or configuration in lieu of those used in the references solves no stated problem and produces no benefits and would have been an obvious matter of design choice for someone skilled in the art.

Additionally, many of the dependent claims claim elements/materials/shapes/tools/etc. which are taught by the reference or are well known in the prosthetic art and would have been obvious to one having ordinary skill.

Claims 1, 3, 5-15, 17-51, 131, 133, 135-145, 203-258 (all claims not withdrawn) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brantigan (4,834,757).

Brantigan teaches a spinal implant comprising bone engaging structures which are slanted towards the trailing end comprising a forward (anterior) facing facet that is

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longer than a rearward facing facet and said rearward facing facet has a steeper slope; the structures further include side facets. Brantigan teaches the structures are spaced apart forming grooves which are "u-shaded" or "box like-shaped".

In the alternative, under 35 U.S.C. 103(a): Many of applicant's dependent claims claim a wide range of possibilities, for example, an angle can be less than 90 degrees, perpendicular, or greater than 90 degrees; the groove can be v-shaped, u-shaped, box-like shape; etc, lacking any criticality in the specification, the use of any claimed variation, ranges, or configuration in lieu of those used in the references solves no stated problem and produces no benefits and would have been an obvious matter of design choice for someone skilled in the art.

Additionally, many of the dependent claims claim elements/materials/shapes/tools/etc. which are taught by the reference or are well known in the prosthetic art and would have been obvious to one having ordinary skill.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce E Snow whose telephone number is (703) 308-3255. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (703)308-2111. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

bes
April 16, 2003



BRUCE SNOW
PRIMARY EXAMINER